AGRICULTURAL.

TOPICS OF INTEREST RELATIVE TO FARM AND GARDEN.

Points on Sheep.

The sheep, says the *New England Farmer*, the most tender, as well as the most dependent animal on the farm, is the most neglected. It appears to be the general opinion that any kind of land is good enough for a sheep pasture. Many seem to think that the land they occupy is not well adapted to sheep because it produces good crops of grass, and is free from stones, stumps and bushes. If they keep any sheep it is for the purpose of utilizing some land that is too rocky and barren to produce paying crops that require cultivation, and which is of little value for pasturing cattle and horses. Few persons think it is necessary or even advisible to improve a sheep pasture. They believe that these animals can "pick up a living" on lands where any kinds of vegetation grow. How to keep sheep without any cost is a problem that many persons have been trying to solve. Volumes have been written to prove that sheep will live months without water, providing they are in a region where there are heavy dews. Every few months some one "rushes into print" to declare that sheep will live for years without salt. The straw of wheat, barley, rye and flax is thought to be good enough food for sheep during the winter. They advocate allowing them to remain in a rocky pasture till the frost kills and the snow covers the grass, and then return them to this place early in the spring for fear that the hay will not "hold out" for the cattle and horses. During all the year they complain that "the bottom has fallen out" of the wool business.

Catching a sheep is performed in various ways. The old shepherd's crook is now seldom employed for this purpose, says the London *Live Stock Journal*, and the less the better. They will almost invariably kick and twist sufficient to hurt themselves. There is no better way of catching a sheep than by putting the modern crook around its neck. When they are caught by the hand the skin should be included in the handful. If they are caught by the wool merely it is sure to pull out, and the sheep get away. In catching them by hand the neck is the best place to grip, and catching them by the ribs or the hinder parts should never be allowed.

It pays to provide clover hay for sheep, in the opinion of Colonel Curtis, expressed in the New York *Tribune*. A sheep, unlike a horse or cow, cannot subsist entirely on grain; they lose appetite and get sick if fed too much grain. And another thing must not be forgotten—they must be fed evenly as to time and quantity. When sheep have clover hay they will not have stretches, as the clover keeps the bowels from becoming constipated; and for the same reason they do not need linseed meal, which they should always have if fed on timothy hay. This does not agree with sheep, and should always be fed in connection with roots or linseed meal, to offset its constipating effect.

I do not wonder, says one in *Farm and Home*, at the farmer's failure as a wool-grower when we consider his education upon the subject. Sheep will live on very rough food and endure a great deal of exposure, and certainly they get about all they can stand of both at the hands of the common farmer. Upon the other hand no animal will respond more freely to kind treatment and good care than sheep. But neglect seems to be the great drawback to the farmer as a wool-grower; and because sheep fail to give returns under such treatment they are pronounced unworthy. A few extra dollars placed in a good buck will be returned greatly multiplied in the enhanced value of the lambs. No man can afford to disregard the quality of the buck he uses. My experience with sheep has taught me that they are profitable; where farmers size their flocks according to their farms and facilities for caring for them they cannot fail to reap reasonable rewards.

Farm and Garden Notes.

Plants like fresh soil. To grow a plant well, pot it often.

Tulips and hyacinths should be planted about four inches deep and six to eight inches apart.

A considerable quantity of sand, well mixed with the heavy soil, will make beets much sweeter than if not used.

Narcissuses are most effective when planted in clumps. The bulbs should be set at about the same depth as tulips.

A New Brunswick paper remarks: "Since the potato bugs made their appearance here the potato rot has entirely disappeared."

If you have good grass or clover let both sows and pigs run to them. They will live and thrive on this with very little other feed.

If a good show of bloom is desired from bulbs in the spring they should be planted in the fall, and the earlier they are planted the better.

One of the great drawbacks to beginners in poultry raising is to attempt to keep fifty fowls in a house or lot none too large for twenty-five.

Ensilage made from rich material and properly preserved, says the *Prairie Farmer*, is more nearly like pasturage than any other food we have.

Seventy-five years ago the first tomatoes grown in this country were cultivated as a strange and showy horticultural curiosity in a garden in Salem, Mass.

Mr. Chamberlain, of the Iowa Agricultural Cottage, says of ensilage: "It seems reasonable; it looks as though ensilage would pay: I think it has come to stay."

By the roller process bran is richer in nitrogen and fat than either whole wheat or the flour. Bran is a concentrated food which, though variable in composition, possesses high nutritive value.

Professor Sanborn, of Columbia College, Mo., believes that fine-ground corncob meal has a high value and coarse cob meal but little as pig feed. He thinks the former better than clear meal.

There is no way to prevent toads getting into the well except to cement over the earth around the well for a circumference of six feet, and the cover or top of the well should be close and tight.

Good clover hay is always considered as equal to any other. It is the standard by which all other grasses are compared, and no farm is considered fully supplied for the winter that has not had a crop of clover grown upon it.

Horses put to hard work will almost surely show puffy spots under the harness, which will soon make bad galls if neglected. Lift the harness and bathe the spots with cold water when the teams rest at evening. Make sure that collars, especially, fit well and are smooth and hard.

Immediately after a rain, or as soon as the ground will permit, is the proper time to cultivate the soil, as the grass will then be more easily destroyed by the sun's rays when thrown up; while the stirring of the soil for a few inches will prevent loss of moisture after dry weather shall again set in.

It is true that the milk of cows that are worried or frightened will sour much quicker than when not so worried. Infants fed with the milk of cows worried or heated by running (which is sometimes caused by boys in bringing them from the pasture) will suffer from colic, and often from diarrhœa.

Turkeys do little harm but great good on the farm from the time meadows are mowed until October. In their rambles over the fields they destroy innumerable bugs, worms and grasshoppers that are injurious to crops. They should not be allowed to go wild, however, but should be driven up every evening to roost near the barns.

Sheep manure contains from ninety to ninety-five per cent. of the plant food contained in the rations consumed by the sheep. It is, therefore, a very rich fertilizer, as experience has shown. It is especially rich in nitrogen in an available form, and for that reason is excellent for use as a starter in the hill for corn and potatoes.

Scaly leg is caused by a minute insect which burrows under the scales on the shanks of fowls, causing them to enlarge. This may be cured by dipping the shanks of those affected into crude petroleum, or a mixture of lard and kerosene may be thoroughly rubbed into the scales. Repeat the treatment in ten days and the cure will be completed.

Asparagus roots may be put down in the fall, but the ground should be well prepared in advance by filling trenches with fresh manure and allowing the manure to heat and decompose in the trench after covering with earth. In the fall the manure and earth can be incorporated, and the trench will be in excellent condition for the roots.

Hungarian grass proper has black seed mainly. The millets have yellow seed. Hungarian grass has less head and more stalk and leaf, and is less liable to rust, and hence is a better hay crop and not so good a grain or seed crop. In selecting seed for a hay crop buy of a reliable seedsman, and take that which has the largest possible proportion of black seed.

Prominent poultrymen grow a large crop of cabbage for winter use. In the cold season the cabbage is either chopped fine and fed to the hens or tied to small stakes so that they can pick the heads at will. There is no great amount of nutrition in cabbage, but it serves as a change from grain to green and bulky food. Every poultryman should lay by a few for the hens.

By retaining the female lambs from ewes that usually bear twins, and annually selecting from the most prolific breeding stock, the number of lambs may be gradually increased each year. Numerous experiments in Europe have demonstrated that the flock can be made to consist of ewes that will regularly produce twins, and sometimes triplets. But in so selecting the ewes their capacity for providing a proper amount of milk must not be overlooked.

The *New England Farmer* says that practical and successful men claim that a constant supply of salt for swine is a safe preventive of diseases, and that by its constant use the system is made strong to ward off disease. When the farmer has wood ashes and charcoal at hand it is a great advantage to mix the salt with them. When the salt is given at regular intervals it prevents them getting a mouthful of salt at once, and more, they relish this mixture very much.

Mr. Henry Stewart, the well-known writer upon stock feeding and kindred subjects, says in the *Dairy World* that he thinks there is no good reason why a farmer should not combine the dairy and beef rearing together. The cows must be kept to rear the calves. Then why not keep good native cows, such as can be made to produce two hundred pounds of butter yearly, at the least, and cross them with a good Shorthorn bull of milking family (a Princess bull for instance), and rear the heifer calves for beef, feeding them with the warmed skim milk, and a liberal ration of bran and corn meal, and pushing them on to get them to eight hundred pounds at a year old and 1,500 at two and one-half years, and turning them off at a good profit.

A company in Russia has equipped and started for Central Asia an expedition which will establish cotton plantations.

Zeal without judgment, is like gunpowder in the hands of a child.

SCIENTIFIC AND INDUSTRIAL.

Good carpets from common moss are the recent production of a French manufacturing establishment.

The cause of grouse disease, which has proven so destructive to British game, is to be investigated by Pasteur.

By the use of palladium in the hair-spring and balance, a Geneva watchmaker claims to have produced accurate time-pieces which are unaffected by magnetism.

A new sword handle has been constructed by a Leipsic professor on, it is claimed, anatomical principles. The designer asserts that, being planned with reference to the hand's mechanism, it can be held with absolute safety.

Cotton has been successfully introduced into the districts of the Caucasus, and extensive plantations are to be established in the vicinity of Erivan. The Caucasus Agricultural Sociery will send agents to study the American system of culture.

Pasteur proves the value of his preventive of splenic fever by showing that in France, during the last five years, the mortality of inoculated sheep has ranged from 0.75 to 1.08 per cent., that of non-inoculated being 10 per cent. Only 0.28 to 0.50 per cent. of inoculated cattle died, and 5 per cent. of others.

So various are the forms of plant-life that it seems well-nigh impossible to find a spot where some kind of vegetation will not thrive. Mr. John Ball, a naturalist returned from South America, therefore congratulates himself on having seen an absolutely plantless land at Tocopill, about twenty-two degrees south of the equator, on the rainless west coast. Not so much as a lichen could be discovered on the rocks, even with microscopic aid.

A popular fallacy, according to Mr. A. W. Hare, of the Royal Society of Edinburgh, is the belief that water from a rushing torrent is safer for drinking purposes than water from a sluggish stream, for the reverse is really the fact. Sewage-contaminated water contains fewer organisms after ten or twelve days than river water, for the reason that the microbes' rapid growth during the first two or three days exhausts their food supply.

An immense drainage work undertaken by the Russian Government contemplates the recovery of the vast region known as the Pinsk marshes, in the southwest of Russia, near the borders of Gallicia, and which hitherto has prevented communication, not only between the Russian districts on either side, but also between Russia and Austro-Germany. Up to the present time about 4,000,000 acres have been reclaimed by means of the construction of several thousand miles of ditches and canals.

Recent discoveries have settled the vexed question of the former existence of lions in Australia. Bones from the Wellington Caves, New South Wales, are regarded by Professor Owen, of the British Museum, as being those of a marsupial or pouch-bearing lion, fully equal in size to the existing African species. These remains were found in connection with those of the Tasmanian Tiger and Tasmanian Devil. Quite curiously, Professor Owen many years ago expressed the conviction that certain ancient herbivorous animals of Australia must have been kept in check by a co-existent race of lions.

A Merchant With a Long Head.

A Boston capitalist, who is a leading merchant as well as a large owner of real estate, is noted for the interest he has has taken in young men in clerical positions. Once a frightened bank cashier waited upon him to say that by the mistake of one of the clerks a check of the merchant's had got into the pigeonhole marked "protested." As Mr. Millions might have heard a rumor that his check had been protested, the cashier hastened to explain, and said that he would discharge promptly the young man who made the mistake.

"And why discharge him, sir?" mildly asked Mr. Millions.

"Because he put your check in the 'protested' box.'

"It is a good many years," said Mr. Millions, as he tilted back in his office chair, and after his fashion harpooned his blotting pad with his pen, "since I was a young man, but my memory is that I sometimes made mistakes. If I had been discharged for every mistake I made, I should not have made my fortune. The young man whose mistake is pointed out to him and forgiven is the most careful man in the office ever afterward. I think my business relations with your bank are likely to be prolonged if the young man is not discharged."

And the young man was not discharged.—*Boston Transcript.*

Remarkable Age of Triplets.

There was born in Foshen, Ireland, on March 26, 1788, a triplet of girls, Sibyl, Sarah and Susan Hurlburt, children of Gideon and Anna (Beach) Hurlburt. For the great period of eighty-seven years this triplet remained unbroken. Sibyl dying first at that age in June, 1875. In October of the next year Susan died at the age of 87, Sarah lived at the age of 95, dying on January 11, 1883. These sisters looked so much alike—particularly Mrs. Grennell and Bushnell—that up to 75 or 80 years of age it was difficult for the most intimate friends to tell them apart; even then they would mistake one another among themselves.—*Chicago News.*

She Did.

"Ethel dear," he asked tenderly, "do you believe in love in a cottage?"

"Yes, indeed," she answered enthusiastically, "if the cottage is at Long Branch."—*New York Sun*